REMARKS

Claims 1-35 are pending in the application, of which claims 1, 15, 23, and 24 are independent. Claims 2, 9, 16, and 25 have been canceled. Favorable reconsideration and further examination are respectfully requested.

Claims 1, 3-8, 15, 17-21, 23-24, 26-30, and 33 were rejected under 35 U.S.C. 102(b) as being anticipated by *Kalkunte et al.* (5,859,980). Claims 10 and 31 were rejected under 35 U.S.C. 103(a) as rendered obvious by *Kalkunte et al.* (5,859,980) in view of *Dixon et al.* (4,344,132). Claims 11 and 32 were rejected under 35 U.S.C. 103(a) as rendered obvious by *Kalkunte et al.* (5,859,980), in view of *Dixon et al.*, and further in view of *Haumont et al.* (US 2004/0071086). Claims 13 and 14 were rejected under 35 U.S.C. 103(a) as rendered obvious by *Kalkunte et al.* (5,859,980). Claims 14, 22, and 35 were rejected under 35 U.S.C.103(a) as rendered obvious by *Kalkunte et al.*, in view of *Kuo et al.* (US 6,105,079).

The Applicant proposes amending claim 1 to include "determining an under-run tolerance of the receiving network, the under-run tolerance indicating the extent to which the receiving network will tolerate running out of data during a relay operation." Applicant further proposes amending claim 1 to recite "determining a relay threshold based on the length of the message, the transmission rate, and the data receiving rate, and the *under-run tolerance*."

As described in Applicant's specification on pages 11-12, the relay-threshold is adjusted to reflect the extent to which the receiving network will tolerate an under-run of data in the FIFO-memory during a relay operation. For example, if the receiving network is relatively intolerant of under-runs, the relay threshold can be adjusted upward to reduce the probability of an under-run at the expense of increasing the data-relay latency. On the other hand, if the receiving network is relatively tolerant of under-runs, the relay threshold can be adjusted downward to reduce the data-relay latency at the cost of increasing the likelihood of an under-run. Applicant's under-run tolerance sets an appropriate level of under-run-to-latency tradeoff according to how well the receiving network can tolerate under-run. Thus depending on the

under-run tolerance of the receiving network and the latency sensitivity of the data, the relay threshold is set to optimize the proportion of under-run-to-latency.

Kalkunte fails to disclose or to suggest determining an under-run tolerance of the receiving network, the under-run tolerance indicating the extent to which the receiving network will tolerate running out of data during a relay operation. *Kalkunte* also fails to disclose or to suggest determining a relay threshold based, in part, on the under-run tolerance.

As described in col. 5, line 66, to col. 6, line 8, *Kalkunte* calculates a relay threshold (XMTSP) based on the differential time between packet filling and removal, the arrival rate λ_e, and a variable factor *a* that is determined based upon the characteristics of the PCI bus. *Kalkunte* neither describes nor suggests calculating the relay threshold based on the under-run tolerance of the receiving network or determining the under-run tolerance of the receiving network.

Rather, *Kalkunte* teaches away from determining the relay threshold based, in part, on the under-run tolerance of the receiving network. In col. 2, lines 34-36, *Kalkunte* describes setting the relay threshold to minimize both the under-run probability and the latency: "the calculation of the transmit start point for each packet ensures that packet latency is minimized with minimal underflow." In col. 6, lines 55-68, *Kalkunte* describes minimizing the under-run probability and reducing the latency of the interface by providing "an optimal start point for each packet in order to minimize transmit underflow and reducing the latency of the interface." Applicant asserts that minimizing or reducing both the under-run probability and the latency is not feasible in *Kalkunte* because the latency and the under-run probability are inversely proportional. An under-run occurs when the FIFO runs out of data during data transmission; therefore, storing more data in the FIFO reduces the under-run probability. However, storing more data in the FIFO also increases the latency of the interface. As a result, minimizing the probability of under-run inherently increases the packet latency and vice versa.

If *Kalkunte* were able to reduce both the packet latency and the under-run probability during a data relay, there would be no need for him to use the under-run tolerance of the receiving network for determining the relay threshold. Instead, the relay threshold would always

be set to a value that minimizes both the under-run probability and the latency, as described in the previously cited passages of *Kalkunte*. As discussed above, Applicant's invention does not assume that both the under-run probability and the latency can be minimized together. Rather, Applicant contends that under-run probability and latency exhibit an inversely proportional relationship that necessitates using an under-run tolerance to optimize the proportion of latency-to-under-run during data relay.

Claims 15, 23, and 24 include similar limitations to claim 1 and are patentable for at least the same reasons as claim 1. *Dixon*, *Haumont*, and *Kuo* fail to disclose or to suggest anything that would remedy the foregoing deficiencies in the teachings of *Kalkunte*.

The dependent claims are also believed to be patentable for at least the same reasons as the claims on which they depend. Each dependent claim partakes of the novelty of its corresponding independent claim and, as such, has not been discussed specifically herein.

That the Applicant has declined to address certain comments of the Examiner does not mean that the Applicant agrees with those comments. Moreover, that the Applicant has asserted certain grounds for the patentability of a claim does not negate the existence of other grounds for patentability of that claim or other claims. Applicant amends the claims only to expedite prosecution of this application. Accordingly, these amendments are not meant to be an admission of unpatentablility of the originally filed claims.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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